

Sage Notes



... promoting interest in
Idaho's native flora.

FALL 2008 ❖ SAGE NOTES ❖ A Publication of the Idaho Native Plant Society Vol. 30 (3)

Native Wildflower Seed Collection in the Seven Devils Mountains of West-Central Idaho

Through a 2007 ERIG grant, the Idaho Native Plant Society supported a second year of seed collection activities for University of Idaho native plant domestication program. The primary purpose of the program is to find native plant materials that may be useful in home landscapes. The target region for the 2007 collections was the Seven Devils region of west-central Idaho. Species collected will be established in the field in the spring of 2008 at the Aberdeen R & E Center and evaluated for aesthetic value, hardiness, and other useful horticultural traits. Success of this project will improve commercial availability of native plants for landscape purposes and bring greater public awareness of the exceptional beauty of Idaho's native flora.

The goal of the collection activity was to take representative small samples (50-200 seeds) of perennial wildflowers and small shrubs. Specific plants sought included penstemons (*Penstemon* sp.), paintbrushes (*Castilleja* sp.), buckwheats (*Eriogonum* sp.), lupines (*Lupinus* sp.), mints (*Agastache* and *Monardella* sp.) asters and daisies (various species), serviceberry (*Amelanchier alnifolia*), and ninebark (*Physocarpus malvaceus*).

An initial scouting trip was completed June 26 through June 28, during the peak bloom season at the mid to high elevations. Accompanying the author on the scouting trip was Phillip Waltman, a UI summer employee and future horticulture student, Tony McCammon, Payette County Extension Educator, and Bill Loftus, UI Communications Specialist. Searches were completed in three separate areas of the Seven Devils Mountain Range. The first day was spent in the Southern Slopes, accessed via state highway 71 west of Cambridge. This took us into the lower end of Hell's Canyon from where we climbed the heart-stopping Kleinschmidt Grade to Cuprum and traveled back east to Council. The second day was spent near the high peaks of the Seven Devils. Using the Seven Devils campground as a base, we searched the dry ridges and rocky slopes just outside the wilderness boundary (avoiding the complications of harvesting seed in a designated wilderness area). The third day was spent in the northern reaches of the range in the hilly country above Pittsburg Landing. This somewhat late date for the scouting trip allowed us to double up and actually harvest seed of some of the earlier wildflower species at the lowest elevations. Most seed was collected on a return trip completed August 2 by the author and Phillip Waltman.

Continued on page 5.....

In this Issue

<i>Letter from the President.....</i>	<i>2</i>
<i>Albert Stage Remembered</i>	<i>3</i>
<i>Native Plant Appreciation Week</i>	<i>4</i>
<i>ERIG Awards Announced.....</i>	<i>7</i>
<i>A Tribute to John Muir.....</i>	<i>8</i>
<i>BSU Botanical Workshops</i>	<i>9</i>
<i>Tick-borne Relapsing Fever</i>	<i>10</i>
<i>Bio: NW Botanist William Baker... </i>	<i>11</i>
<i>Humor: Unless</i>	<i>13</i>
<i>INPS News.....</i>	<i>14</i>
<i>Chapter News</i>	<i>15</i>

Check out Sage Notes in color on the INPS website: <http://www.idahonativeplants.org/>

{ Articles contributed to *Sage Notes* reflect the views of the authors and are not an official position of the Idaho Native Plant Society }

Letter from the President

Dear INPS Members,

This year I issued a challenge to come make the annual meeting larger than last year. A great many of you responded by coming and making this a terrific gathering. The field trips were great and the companionship wonderful. Many, many kudos to Chairperson Sylvia Chatburn and her team for putting on such an informative, instructive and fun meeting.

Next year's annual meeting is scheduled for June 26 and 27. Sah-Wah-Be Chapter will be lead chapter for this event. The 2009 annual meeting looks like it will be held in a very interesting part of Idaho. Island Park is the proposed place. So, mark your calendars now for the 2009 annual meeting. There will be much more information in future issues of Sage Notes.

The proposed changes in the bylaws were voted on at the annual meeting and passed unanimously. Again, many thanks to the bylaws committee and all the hard work they put in on this revision.

As a short reminder, the INPS Board adopted an official logo after our December meeting (printed in the last Sage Notes) that is available in digital form for putting on t-shirts or whatever you choose.

Pahove Chapter is organizing a committee for the Rare Plant Conference that is scheduled to be held in 2009. If you have never been to a RPC, this is the year you should schedule to come to the conference. As a lay person I found the conference I attended to be very informative and interesting. It was also, surprisingly to me, very understandable. More news will be in the next Sage Notes.

The nominating committee will begin its work this Fall to find some new state officers. The state organization is only as strong as the people who serve

as officers and committee members. Please think about the skills you have and how you can serve the Society. Committee members are always needed.

Looking forward to meeting a number of you at the next meetings.

Cheers!

Janet Benoit, INPS President



Steve Love collects *Eriogonum compositum* seeds in the Seven Devil's. Story starts on page 1.

In Memoriam

Albert Stage Remembered for his Contributions to Forestry and INPS

Many members of INPS will remember fondly Al Stage of the White Pine chapter of INPS. We are sad to report that Al died of a brain tumor July 12, 2008 at his home in Moscow, Idaho. He grew up in Massachusetts and received a M.S. in mathematical statistics in 1961 and a Ph.D. in forest mensuration in 1966, both from the University of Michigan. He served in the U.S. Army from 1952 to 1954 in the Philippines and the South Pacific, and later served in the Army Reserve.

From 1954 until his retirement in 1995 he gained an extensive knowledge of and passion for Idaho forests from his years working in Northern Idaho. He was at the Moscow Forestry Sciences Laboratory from its opening in 1963 and was a project leader until his retirement in 1995.

Al received several awards and honors including the Distinguished Alumni Award from the University of Michigan's School of Natural Resources, the USDA Superior Service Award, the Forest Service Forest Insect and Disease Award for Research Excellence, and in 2006, the Society of American Foresters (SAF) Award in Forest Science. He was elected a Fellow of SAF in 2000. The University of Idaho's College of Natural Resources honored him with an Associate Alumni Award in 2001.

He was author of more than 100 publications on basic mensuration, sampling, hydrology, plant moisture stress, climate and disease, insect population dynamics, root disease, fertilization, fire effects, and modeling stand and tree dynamics. He is well known in forestry circles for introducing the Prognosis Model for Stand Development in 1973. The fact that this model is still used today reflects how his research has influenced forestry. He was acknowledged as well for his mentoring and his encouragement of professional development of many who worked with him.

Al and his wife Marjory have been members from the earliest days of the White Pine chapter, and Al served as president of the chapter for three terms from 2004 through 2006. His dedication kept the chapter together during this period. As president he also participated in numerous State INPS board activities and was a primary organizer of a very successful annual State INPS meeting held at the upper end of Priest Lake. He ensured that participants would learn more about forest progressions. Steve Brunsfeld's presentation at this meeting on how and why our coastal disjuncts occur was so popular that Al made sure the White Pine Chapter made a video recording of Steve's repeat presentation at the NW Herbaria Conference.

Because he had an extensive knowledge of the forests of Idaho and had many contacts with foresters, botanists, and ecologists throughout the country, he was able to organize numerous and varied educational field trips for the chapter and engage speakers on many subjects. He also brought issues such as those raised by USFS forest planning and conservation easements before the chapter. Two special trips he organized for the chapter were the campout at Priest River Experimental Forest and a tour of his and Marjory's Moscow Mountain home and property, which is complete with a gazebo for sleeping under the stars and a view of the lights of Moscow.

After Chuck Wellner's passing, Al made a trip to Coeur d'Alene to get special White Pine seedlings to plant as a memorial in the native plant area of Berman Creekside Park in Moscow. He also helped transplant a native Tiger Lily beside the tree.

Al's dry humor, his knowledge and experience, and his willingness to take on a task whether it be planning a meeting or hiking a mountain trail will be sorely missed. He mentored many in the chapter and was always at the front of the line in support of chapter activities.

White Pine chapter board and members

Celebrated: Native Plant Appreciation Week

Native Plant Appreciation Week was April 28-May 3. Many members and chapters of INPS sponsored events, wrote articles, and came together to acknowledge the immutable force of Idaho's native flora.

Calypso Chapter

Calypso Chapter held two events during NPAW to which the public was invited. The first event was a walk on Tubbs Hill in Coeur d'Alene. This is an annual event which we advertise and attempt to get more people interested in INPS. This year a small group hiked the trail partially around the lake and then over the summit of the hill and back to the parking lot. Several Kinnikinnick members joined the group again this year.

The second event was the annual Q'emiln Trails hike in Post Falls. Q'emiln Trails is a 78 acre natural park maintained by the city of Post Falls. The park is well known for its natural climbing walls. Q'emiln was the name of the Coeur d'Alene Indian village there at Post Falls. The name means "Throat of the River". The village was vacated in 1878. Several members of Calypso and some guests hiked the trail there. Laura and Bill Asbell once again hosted a pot luck on their property along the Spokane River outside of Post Falls. They have been diligently working to restore native plants to their property. A short hike was taken on their property to see how the native plants are faring for this year.

Kinnikinnick Chapter

President Carol Jenkins, and past President and Bee Editor Valle Novak, published articles in the Bonner County Daily Bee about using native plants in landscaping.

Pahove Chapter

The Pahove Chapter joined with the Idaho Botanical Garden (IBG) to sponsor two events in honor of Native Plant Appreciation Week in 2008. More than 40 members of the public showed up for a two-hour Wildflower Walk in the foothills behind the Old Penitentiary/Idaho Botanical Garden complex on a Sunday morning in late April. A good time was had by all as the flowers were in fantastic bloom this year, with arrowleaf balsamroot and several biscuitroot species

being of special note. The second event was a Community Education-style class taught at IBG titled "Common Wildflowers of the Boise Foothills" one evening in early May. A special thanks goes to Ann DeBolt for organizing and leading both of these events. If you have ideas for next year's Native Plant Appreciation Week, be sure to share them with your chapter president!

Sah-Wah-Be Chapter

To celebrate Native Plant Awareness Week, the Sah-Wah-Be Chapter set up two tables at the Pocatello Environmental Fair in Tydeman Park and prominently displayed our eight-foot INPS banner. Available to fair-goers were INPS brochures, handouts about our Sah-Wah-Be chapter and its summer field trip schedule, 100 free starts of a variety of native plants, and a plant-a-seed -to -take- home activity for all. During the week, the Idaho State Journal printed an article about our chapter and its purpose, plus a report on our annual dinner and meeting with a photo of our newly-elected board. The last day of this Week, May 3, was the advertised kick-off event for members and the public of our May through September field trips: Dr. Karl Holte led 40 plus people on a plant walk along two trails in the nearby Caribou National Forest, followed by a potluck and socializing at the Holtes' home.

White Pine Chapter

On March 29, the White Pine chapter participated in Moscow's "Earth Week Kick-Off" event at the Palouse Mall. This event was sponsored by the Palouse Earth Day Association. We had a display that described our organization, activities, and resources for learning about native plants. We were able to network with other local groups that have an environmental focus, and added some new members and contacts to our email list as a result of this opportunity for publicity.

On April 10, we co-sponsored the presentation of "Creating a Native Garden Esthetic," presented by Tim Eaton, owner of Prairie Bloom Nursery, a joint program with the Palouse Prairie Foundation at the Neill Public Library in Pullman, WA. Tim has owned/managed Prairie Bloom Nursery for over 10 years, and through his extensive experience and knowledge talked about the role natives play in gardens of the Palouse and offered garden design tips.



Phillip Waltman takes location notes for a collection area in the Seven Devil's.

We found each of the search areas unique and all three were rich and varied in the flora of interest. Our travels through the Southern Slopes took us from elevations of 2,100 feet along the Snake River in Hell's Canyon to 4,900 feet near Cuprum. The lower elevations were typified by dry grassy slopes while pine forests dominated the upper elevations. Shortly after turning west from Cambridge, we entered the Southern Slopes and quickly encountered one of the outstanding wildflowers of the region, lovely penstemon (*Penstemon venustus*). The plants were large, covered with hundreds of light purple blooms, and often formed huge populations along road cuts and hillsides. This penstemon species was ubiquitous throughout the Seven Devils region and we never tired of seeing it. We sampled several of the largest, most variable populations.

Another outstanding find in the lower end of Hell's Canyon was arrowleaf buckwheat (*Eriogonum compositum*), a unique buckwheat with large, heart-shaped leaves and tall umbels of dark yellow flowers.

About halfway up Kleinschmidt Grade we explored a narrow, rocky gorge and discovered several treasures, including whorled penstemon (*Penstemon triphyllus*), a small heuchera with tiny dark red leaves tentatively identified as small-leaf alumroot (*Heuchera micrantha*), and a large thicket of a low-growing form of ninebark. The last outstanding discoveries in the Southern Slopes was a population of yarrow (*Achillea millefolium*) with dark pink flowers, a tall, graceful form of hot rock penstemon (*Penstemon deustus*), and several small populations of the fascinating thyme buckwheat (*Eriogonum thymoides*), all found along Cuprum-Council road about 15 miles west of Council.

The second day was spent in the high peaks area of the Seven Devils where the wildflowers were just coming into bloom and large patches of beargrass (*Xerophyllum tenax*) located along the access road were a photographers dream. Too bad this beautiful plant is not adapted to soil and temperature conditions outside its native mountain home. Most of

the scouting in the high peaks area was done at elevations of 7,500 to 8,100 feet. One of the most interesting plants found along the dry rocky ridges around the trailhead was a remarkably beautiful form of yellow buckwheat (*Eriogonum flavum*). Unlike the rangy, somewhat sparse flowering plants typical of the species, these plants exhibited up to 30 flower clusters on a plant, had short (maybe 5 inches tall) flower stems, large flowering heads (up to 2 inches in diameter), and came in colors ranging from whites through yellows, pinks, and the occasional dark red. I am interested to see what these plants look like in cultivation. Other key finds included a compact form of Wyth's buckwheat (*Eriogonum heracleoides*) with scarlet flower buds, a variety of shrubby penstemon (*Penstemon fruticosus*) with large mats of tiny serrated leaves and large purple flowers, and a very low-growing form of pennyroyal (*Monardella odoratissima*) with masses of pink and purple flowers.

Exploration of the northern part of the mountain range was limited to the grassy slopes on the west side of the saddle that cradles the high point of the road between White Bird and Pittsburg Landing. The elevation of the area explored ranged from 3,600 to 4,100 feet. There was a less diverse flora in this area in comparison with the two scouted earlier. However, we did manage to find a small population of Idaho native blanketflower (*Gaillardia aristata*) and a tall form of ninebark that seemed to have limited tendency to spread and form thickets.

It was apparent in August upon return to collect seed that very little or no rainfall occurred in the Seven Devils region between June scouting and August collection. As a result, many of the plant populations marked for collection were stunted, parched, and exhibited early dormancy. Some of these plants set very little or no seed. This was especially true for the paintbrushes and lupines. In spite of these harsh conditions, seed was successfully recovered from about 90% of the designated populations. This was considered remarkable success given the climatically imposed potential for failure.

The seed collected during the summer of 2007 will be germinated in the greenhouse in spring of 2008 and subsequently transplanted to field plots at the

University of Idaho's Aberdeen R & E Center. They will be evaluated for 2-6 years for hardiness, adaptation, and horticultural value. Individual plants with superior horticultural traits will be propagated and evaluated at other locations in southern Idaho and subsequently propagated for commercial distribution. This approach, although different from practices employed for *in situ* revegetation and population enhancement, will provide the best chance for success at introducing new landscape materials and for educating the public to the value of our beautiful Idaho natives.

Summary of the collections made in the Seven Devils Region in 2007. Total species collected came to 31. Multiple collections of some species brought the accession total to 49.

Achillea millifolium, *Agastache urticifolia*, *Amelanchier alnifolia*, *Castilleja applegatei*, *Castilleja hispida*, *Castilleja miniata*, *Castilleja rhexifolia*, *Erigeron perigrinus*, *Eriogonum compositum*, *Eriogonum flavum*, *Eriogonum heracleoides*, *Eriogonum ovalifolium*, *Eriogonum thymoides*, *Eriophyllum lanatum*, *Gaillardia aristata*, *Heuchera micrantha*, *Iliamna rivularis*, *Lupinus leucophyllus*, *Lupinus sericeus*, *Monardella odoratissima*, *Penstemon deustus*, *Penstemon fruticosus*, *Penstemon gairdneri*, *Penstemon glandulosus*, *Penstemon venustus*, *Physocarpus malvaceus*, *Senecio cana*, *Sidalcea oregano*, *Spraguea umbellata*.

About the Authors

Stephen L. Love is a consumer horticulture specialist for the University of Idaho, located at the Research and Extension Center at Aberdeen. His interests include native plants, low water landscaping, and home production of vegetables. Stephen is a member of the Sah-Wah-Be chapter of the Idaho Native Plant Society. He is an avid gardener and recently created his first native plant garden at his home in Aberdeen.

Tony McCammon is a County Educator in Payette County. He develops educational programs to assist both fruit growers and homeowners. He has a special interest in native plants and low-water landscapes. Tony has considerable knowledge in the area of ethnobotany. He was involved in native plant landscape design research in Utah before coming to Idaho in 2006.

Education, Research, and Inventory Grant Program 2008 Award Recipients

The Idaho Native Plant Society (INPS) initiated an Education, Research, and Inventory Grant (ERIG) program in 2003 to support projects contributing to the appreciation, conservation, and advancement of our knowledge of Idaho's native flora and vegetation. In 2008, four ERIG proposals, totaling approximately \$3300, were submitted to INPS. Proposals were reviewed by the four ERIG committee members – Jody Hull, Michael Mancuso, Annette Runnells, and Sarah Walker. If INPS had unlimited funds, we would have fully funded each proposal. All were worthy projects that met the objectives of the ERIG program. Instead, approximately half of the total amount requested was available for the ERIG program in 2008. Committee members collaborated on a decision to fully fund one project, partially fund two others, and not fund one project. Grants were awarded for the following projects:

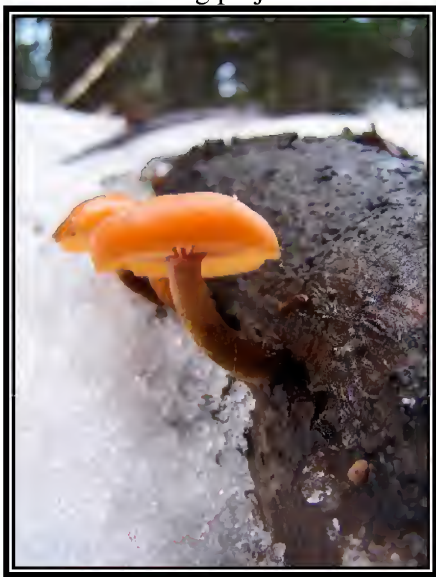


Photo: Dylan Lev-Boyd

Flammulina velutipes, the winter mushroom or velvet foot, fruits from dead hardwoods. These specimens braved the snow in the South Hills, ID on May 25, 2008.

1. Macrofungi of the South Hills, Idaho -

Submitted by Dylan Levy-Boyd. This proposal requested support for a project to produce a preliminary macrofungi species list for multiple plant community types in the Rock Creek Canyon area of the South Hills, Twin Falls County. This would be accomplished by multiple forays to Rock Creek Canyon during spring, summer, and fall months. The objective of this survey project is to improve the understanding of fungi and community ecology in the

South Hills area. This will improve the understanding of an under-appreciated part of the area's biodiversity, and provide land managers and ecologists with a more detailed picture of the resource they are charged with conserving. ERIG funds were used for travel expenses to and from the study area, and to purchase glass for a spore library.

2. Rabbit Creek trailhead wildflower interpretation and conservation project -

Submitted by Kay Beall. This proposal had two parts, both for the upper end of the Rabbit Creek Trail on the Boise National Forest. One component included the construction and installation of interpretive signs regarding wildflowers and high elevation ecology of the area. The signs will highlight local native wildflowers and tree species, alert users in this popular recreation area to the fragility of the high elevation flora, and encourage responsible riding/trail use to help conserve the native vegetation. The second component of the proposal was the construction of barriers to define parking, trail and scenic view areas in order to reduce physical damage to Sacajawea's bitterroot (*Lewisia sacajawean*) and other native wildflowers in the vicinity of the upper Rabbit Creek trailhead. ERIG funds were awarded for the interpretive sign portion of the project.

3. Native plant guide to North Bannock

County/Southeastern Idaho – Submitted by Cathy Frischmann. This proposal requested support for compiling and printing a native plant guide containing approximately 70 species found in southeastern Idaho. The objective of the guide is to educate an increasing number of people interested in native plants growing in their yards, along the greenways, and paths and trails in southeastern Idaho. ERIG funds were awarded largely to help pay a portion of the plant guide printing costs.

A requirement of the ERIG program is that upon completion of the project, successful applicants submit an article to Sage Notes summarizing the project and its accomplishments. So you can look forward to reading about each of the three projects listed above in more detail in future issues of Sage Notes. (Submitted by Michael Mancuso)

Let's Do Something to Make the Mountains Glad

A tribute to John Muir

By Phil Hough, Kinnikinnick chapter

John Muir, American naturalist, was born in Dunbar Scotland on April 21st, 1838. His very name conjures up images of exploration, adventure and early conservation advocacy. Muir's name, and legacy, live on today - the John Muir Trail, one of America's premier hiking trails, runs the length of the high Sierra. The rugged, ice sculpted John Muir Wilderness lies just south of Yosemite and Muir's image graces the 2005 California State Quarter.

His persuasion and persistence helped to create Yosemite, Sequoia, Mt Rainer, Petrified Forest and Grand Canyon National Parks. Muir is often called the "father of the national park system." Muir loved, and revered the Redwoods and giant Sequoias. His conservation ethic was as rooted in these groves as it was in the Sierras. Muir wrote: *"The thirsty mountaineer knows well that in every Sequoia grove he will find running water, but it is a mistake to suppose that the water is the cause of the grove being there; on the contrary, the grove is the cause of the water being there. Drain off the water and the trees will remain, but cut off the trees, and the streams will vanish. Never was cause more completely mistaken for effect than in the case of these related phenomena of Sequoia woods and perennial streams."*

An influential and prolific author, Muir contributed frequent articles and opinion pieces to every major publication of his day. In more than 10 books, 300 articles and numerous letters, Muir recounted his adventures, explorations, scientific observations and beliefs on conservation. Muir's 1901 book, *Our National Parks*, so impressed Theodore Roosevelt that he joined Muir for an extended hiking trip in Yosemite. Muir helped to inspire Roosevelt's own conservation legacy - 150 national forests, 51 bird refuges, four national game preserves, 18 national monuments, 24 reclamation projects, and the National Forest Service.

But Muir wasn't satisfied with governmental actions alone. He saw the need for citizens to engage their voices in conservation, in order to assure that these lands would continue to be protected. Muir wrote to a magazine editor: *"Let us do something to make the mountains glad."* With those words Muir went on to found and lead the Sierra Club.

Muir's career was so closely identified with his love of the Sierras that most people are unaware that he trained in botany. While attending the University of Wisconsin, Muir was introduced to the study of Botany by childhood friend Milton Griswold. And a botanist he remained throughout his days. In almost every page of every journal entry, Muir makes notes or sketches about the plants, trees or flowers he comes across.

In the summer of 1867 he embarked on a 1,000 mile walk from his home in Indiana to the coast of Georgia. Although he took few possessions with him, Muir brought along a plant press on all his travels. In his book about this walk Muir frequently refers to himself as a botanist. On this, and many later trips, he collected and pressed plants, keeping them for later study or sending them to herbaria collections through out the country. Bonnie Gisell writes that John Muir was: *"Considered one of the earliest plant ecologists and a purveyor of biodiversity, his fondness for plants contribute significantly to his understanding of the need to preserve wilderness."*

Muir took many trips to wild places, from Mexico to the Sierras and Alaska. But he was more than an adventurer and advocate, Muir was a scholar and scientist. Muir praised the spirit of wild places; he also studied them. From his trips to Alaska, as well as the Sierra, Muir helped to shape emerging theories about glacial formation and actions. Muir returned to Alaska, fascinated by glaciers as well as the way extremes of climate and latitude shaped the plant world. Muir made the most significant reconnaissance of his day of plants in the far north.

Muir's conservation ethic, his need to preserve what is wild for future generations, may be best summed up by his views on plant reproduction: *"Nature's purpose seen strikingly in seeds and buds, plans of another year, of thousands of years, wrapped up in them."*

Muir's collection of plants has been studied and reproduced in both a book and as a print collection. In 2003 Bonnie Gisell, an internationally recognized Muir historian, began traveling across the United States in search of Muir's plant specimens. Gisell

composed a list of plants from Muir's writings and searched through thousands of plant specimens Muir had found to match his writing to his collecting. While Gisel undertook research and wrote the account of Muir's life as a botanist, Stephen Joseph scanned and prepared prints of the flora Muir collected. Gisel and Joseph have recorded the

discovery of John Muir's North American herbarium. Their book, *Nature's Beloved Son, Rediscovering John Muir's Botanical Legacy*, is due to be released in the fall of 2008. For more information, check out:

<http://www.johnmuirbotany.com/>

The Department of Biological Sciences of Boise State University hosted the first Idaho Botanical Foray in August 2008.

Dr. Jim Smith of the Department of Biological Sciences at Boise State University led the first Idaho Botanical Foray to Mt. Harrison on August 7-10, 2008. Mt. Harrison is south of Burley, Idaho and may be known to non-botanists as the home of Pomerelle Ski Area. However, those with more of a botanical background will recognize this as the home to *Castilleja christii*, Christ's paintbrush. This species is known **only** from the summit of Mt. Harrison and was in full flower at the time of the foray.

Botanical enthusiasts assisted in making over 200 collections over the weekend. Permits allowed for the collection of 1 specimen per species in the Research Natural Area which was the first day's destination. Over one hundred plant species were found on this trip from the summit of Mt. Harrison down to the pool at the bottom of the cirque.



Foray participants on Mt. Harrison

During the second day participants traveled to nearby Mt. Independence which is directly south of Mt. Harrison in the Albion Mountains. This collection was made to document the presence of similar and/or different species on the two peaks. Large numbers of *Cymopterus davisii* were also found around the lowest of the Independence Lakes, a species known only from the Albion and Independence Mountains.

We would now like to invite the public to workshops oriented toward identifying the material that was collected during the foray. Each workshop will start with a brief introduction on terminology and characteristics of the family/ies to be identified in each workshop. The remaining time will be spent keying the plants. Keys, microscopes and necessary dissecting materials will be provided. These workshops will be an opportunity to learn and practice keying as well a chance for those that missed the foray to see what occurs on Mt. Harrison. The tentative schedule is listed below. We will be meeting in room 248, second floor of the Science & Nursing building on the BSU campus (between the Morrison Center and the tallest building on campus). Workshops will be from 7:00-9:00 pm.

Workshop Calendar

October 16, 2008: grasses, sedges and rushes (Poaceae, Cyperaceae, Juncaceae)

November 13, 2008: sunflower family (Asteraceae/Compositae)

December 11, 2008: shrubs and trees (Pinaceae, Rosaceae, Grossulariaceae, Caprifoliaceae)

January 8, 2009: paintbrushes and penstemons (Orobanchaceae/Plantaginaceae)

February 12, 2009: buckwheats (Polygonaceae)

March 12, 2009: miscellaneous families

Tick-borne Relapsing Fever (TBRF)

By Nancy Miller, White Pine chapter

Identifying and photographing wildflowers, hiking, clearing brush, vacationing in rustic cabins, working with wood and brush piles – all these and other favorite summer activities in rural, wooded habitats can potentially put one at risk for being bitten by a soft-bodied tick (usually *Ornithodoros hermsii* in this area) infected with a bacteria (*Borrelia hermsii*) which causes relapsing (i.e. recurring) fever in humans. Because a member of our family and our chapter recently ended up in the hospital after being bitten, it seemed reasonable to make Sage Notes readers more aware of this possibility.



Although the disease is uncommon and may be underreported, it has serious side effects for humans. The tick/bacteria is known from Idaho and Eastern Washington but has been reported in most of the western states. There are 1 to 12 cases reported yearly in Washington and approximately 25 in the Western United States. These soft-bodied ticks usually inhabit rodent nests (primarily nests of chipmunks and squirrels although mouse nests and rabbit warrens have also been implicated). The tick comes out at night to feed on its host so many cases are from people being bitten while sleeping in rodent infested cabins. Generally the person bitten by an infected tick does not know he or she has been bitten, as the tick bites and then drops off, unlike a hard-bodied tick which would usually stay attached. After an incubation period of 3-7 days the infected person may suffer from high fever, chills, headaches, sweating, and muscle or joint pain for 4 to 7 days, then has a period of recovery (4 to 14 days), followed by the relapsing fever again. Without medical treatment this can go on for multiple cycles and can pose serious problems to the kidneys, spinal fluid, etc. and can be fatal in a small number of cases.

- TBRF is not spread from human to human contact although it could in theory be passed by donated blood or organs
- TBRF is usually diagnosed by identifying the spirochetes (spiral shaped bacteria) in a blood smear
- TBRF is treated by antibiotic therapy; there is a risk of Jarisch-Herxheimer reaction at the beginning of antibiotic treatment so this is recommended while in a hospital. The reaction may cause severe chills, increased temperature and pulse rate, and decreased blood pressure.
- Ticks can go for several years without feeding, but remain infective. They pass the infection to their progeny. Uninfected ticks can become infected from feeding on infected rodents. The rodent does not die from the disease.
- There is limited information on immunity to TBRF.
- These bacteria have a unique process of DNA rearrangement so are able to evade the immune system, thus the recurring symptoms
- Many health professionals are unaware of TBRF and its symptoms

Some preventative measures include:

- Avoid being in rodent infested buildings
- Stack wood and brush piles away from buildings
- Wear insect repellent containing Deet when in rural, wooded habitats
- Rodent-proof buildings and remove rodent nesting materials

The information above is summarized from CDC and Washington State web pages. For more information please see these and other web sites pertaining to Relapsing Fever.

<http://www.cdc.gov/ncidod/dvbid/RelapsingFever/index.html>

<http://www.doh.wa.gov/notify/guidelines/pdf/relapsing.pdf>

Northwest botanist William Hudson Baker (1911-1985): captivated by isolated floras

By A. R. Kruckeberg and Rhoda M. Love

William Hudson Baker made significant contributions to the knowledge of floras of Idaho and Oregon during the mid 20th century. Baker was born and raised in Oregon and earned all his college degrees at OSU (then Oregon State College). Baker spent over twenty years at the University of Idaho, teaching botany and adding substantially to the herbarium. He also deposited approximately 2,000 specimens from Oregon in the Oregon State University Herbarium.

William Baker was born in Portland on December 14, 1911, and grew up in The Dalles. His parents were Helen Baker of The Dalles, and William T. Baker, a railroad contractor. The two married in 1910 and set up housekeeping in Portland where William was born a year later. When the boy was approximately four years old, Helen Baker returned to the Dalles and from then on raised him and his younger brother Robert alone. Money was tight; Helen took in lodgers and while in high school, Bill worked as a church janitor.

The details of Baker's life are limited. From OSU records we know that he graduated from high school in The Dalles and subsequently spent two years at Los Angeles Junior College. He then returned to Oregon to train himself for public school teaching, enrolling at Oregon Normal School (now Western Oregon University) in Monmouth where he spent four years and probably met his future wife, Molly Ann Cochran. She was a member of a Lane County pioneer family who grew up on a farm north of Eugene. Molly attended the University of Oregon, and then the Normal School at Monmouth, and may have been taking classes there in the fall of 1932 when 21-year-old Bill Baker transferred from Los Angeles.

During 1933 and 1934, Baker concentrated on his education. This was a period of deep economic depression, and he no doubt realized he would soon need to support himself as well as a wife. He took classes at Oregon State College, returning to Monmouth for his practice teaching. He and Molly were married in 1934; he was 23 and she was 21. The following year Bill completed his degree in

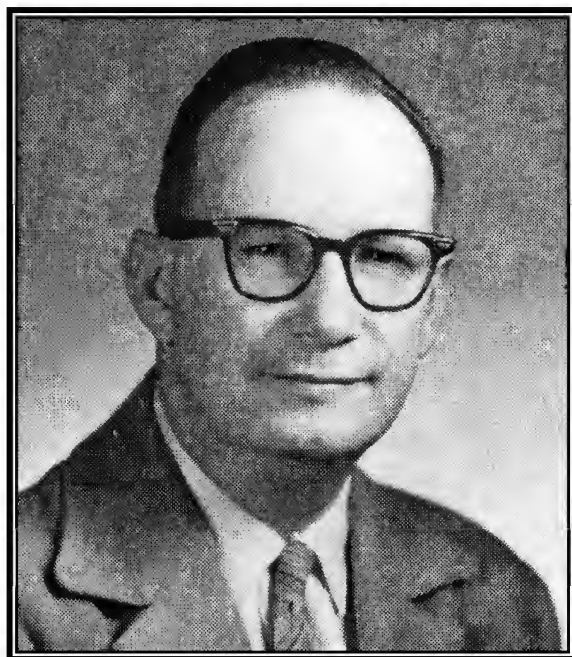


Photo: Idaho Academy of Science

William Hudson Baker, University of Idaho, circa 1950.

Education at OSC, and accepted a position with the public schools in Burns, Harney County. He was promoted to Principal in 1939.

We know from transcripts and OSU Herbarium records that during this period William discovered his life's calling. In 1937 he attended summer school at OSC, studying both General Botany and Systematic Botany, no doubt with Professor Helen Gilkey, whom we must assume awakened his interest in the study of plants. Almost at once Baker began to collect specimens throughout Oregon. The Flora Project Atlas database shows us that from 1937 to 1942 he collected in Wasco, Sherman, Wheeler, Gilliam, Jefferson, Klamath, Lane, Lincoln, Douglas, Curry, Benton, and Linn Counties. In 1939 he took summer term botany courses, including Advanced Taxonomy, at the University of Idaho. In 1940 he collected at Diamond Lake with 21-year-old Arthur Cronquist who was then completing his University of Minnesota doctorate. In 1942 Baker left his administrative position and returned to OSC to work on a Master's Degree in Education with a minor in Biology. Once again under the direction of Helen Gilkey, he wrote his thesis, "Key to the Flora of Fairview Peak for Use in Teaching." (Fairview Peak,

located in southeastern Lane County, supports a flora more typical of the Rogue River area to the south.) He successfully defended his thesis in 1942. In his Masters thesis, Baker thanked his wife Molly for her "...painstaking assistance in checking and proof-reading the manuscript and also for assistance in collecting plants on many field trips."

Baker was now 31 years old, and, at this point, he was either drafted or joined the United States Navy as a Lieutenant and saw service stateside as well as in the Pacific until 1944. Bill and Molly's only child, son James W. Baker, was born the following year. Back in Oregon after his military service, Baker returned to OSC and his mentor, Helen Gilkey, to begin work on a doctorate in Botany. OSC Herbarium records indicate that he botanized heavily at Fairview Peak in Lane County and at Iron Mountain in Coos County. (The flora of Iron Mountain is said to be allied to that of California.) During this time he earned advanced science credits and worked as a graduate teaching assistant.

By 1948 Baker was far enough advanced with his PhD thesis to apply for a college teaching appointment. The University of Idaho was looking for a botanist with his qualifications and that year he was hired by their Department of Biological Sciences. He moved his family to Moscow and began work as an Assistant Professor of botany in the spring of 1949. In April he successfully defended his PhD thesis, "A Taxonomic and Ecologic Comparison of the Floras of Iron and Fairview Mountains in Oregon." During his doctorate work, Baker had discovered a new species of knotweed on Fairview Mountain, which he subsequently named *Polygonum cascadense*. He published the new name in *Madroño* in 1949; the article includes drawings by Helen Gilkey.

During the summers of 1949 and 1950, Baker worked as a Ranger-Naturalist at Crater Lake National Park, taking his family with him to live in the Park. Back in Moscow he wrote to Gilkey, "I have 50 students enrolled in grasses, which is more than last year, ... this with one section of General Forest Botany and the responsibility for the weekly seminar programs round out the teaching load. Then there is the Herbarium and the ten thousand odd plants I collected this past season ..." In 1951 he published "Plants of Fairview Mountain, Calapooya Range, Oregon," in *American Midland Naturalist*. The

Bakers continued to spend summers in Oregon at a house owned by Molly's family on the Rogue River near Illahe. (The dwelling was washed away in the winter floods of 1964.)

At Idaho in 1958 Baker became a full professor and founded the Idaho Academy of Science, serving as its first president. Later he became Chairman of Botany, and in 1972, head of the Department of Biological Sciences. Baker's specialties included floristics, plant distributions, flowering plants of Northwest America, weeds, range and wildlife, and food plants of Idaho. He was coauthor of the 1961 book *Wildlife of the Northern Rocky Mountains*. In 1964 he was elected a Fellow of the American Association for the Advancement of Science. Baker is said to have built up the Idaho Herbarium from around 8,000 sheets to more than 50,000 specimens.

Sadly, in 1972 at the age of 61, Baker began to show the symptoms of Parkinson's disease. His illness forced him to retire from Idaho, and at this time he and Molly moved back to Oregon. In Eugene, to the best of his ability, Baker continued his botanical pursuits including offering his talents as a botanical consultant. As he gradually became more disabled, he hired an attendant who helped him move about in a wheel chair.

Molly Baker died in 1978 and is buried at Eugene's Gillespie Butte Cemetery amid the graves of her pioneer ancestors. William Baker succumbed to the effects of Parkinson's on November 22, 1985, just short of his 74th birthday, and is buried next to his wife. No obituary or eulogy appeared in a botanical publication as far as is known. In 1986 the Idaho Academy of Science established the William Baker Memorial Award for student presentations at Idaho Academy of Science meetings.

Arthur R. Kruckeberg has written, "Baker was captivated by the floras of isolated mountain ranges in southwestern Oregon. His Masters and PhD theses both reflect this interest. Baker's move back to Oregon upon retirement brought him full circle to his beginnings. His botanical output over his lifetime was substantial. His thousands of collected specimens are to be found in herbaria throughout the Pacific Northwest."



By Kent Fothergill

INPS NEWS

Summary of the 2008 INPS Annual Meeting

The meeting held the weekend of June 20 - 22 at Sam Owen Campground was a huge success. Four of the seven chapters were represented. There were 46 people at dinner on Saturday night and attended the official annual meeting. Twenty seven people camped for the weekend.

Everyone attended at least one of the three field trips that were offered. Sylvia Chatburn and Phil Hough led a trip to the Lightning Creek washout on Saturday morning; Molly O'Reilly and Jim Dubuisson let the afternoon trip to Lightning Creek; Thomas Woolf (Idaho Dept. of Agriculture Aquatic Plants Program Manager) led two aquatic plant field trips - one in the morning and the other in the afternoon; Konrad Dahlstrom led a longer hike to Antelope Lake. All of these hikes had a nice display of wildflowers in bloom. Some of the aquatic plants were also blooming! Everyone seemed to be very pleased with what they saw.

The evening speakers were very informative. On Friday evening Chris Schnepf (U of I Extension Service) spoke about white pine restoration, and on Saturday evening Dick Kramer (USFS Sandpoint District Ranger) spoke about plans for the restoration of roads in the Lightning Creek drainage.

Meeting Minutes

The 2008 Annual Meeting was opened by President Janet Benoit about 7:00 p.m. Saturday June 21 in the pavilion at the Sam Owens Campground, Hope, Idaho. A quorum was established. Chapters without a representative were Pohave, White Pine, and Wood River. The minutes of the 2007 Annual Meeting were accepted. The treasurer's report was distributed to all. The current balance is \$11,758.42. A decline in income compared to 2007 was attributed to rescheduling the Rare Plant Conference as a biennial event. Dues notices are to be sent to the members who have not paid their dues. The Membership Committee was asked to review when the last increase in dues occurred.

Island Park, Idaho has been selected as the site for the 2009 State Conference. The 2009 meeting is tentatively scheduled for June 26-27.

All nominees for the 2009 Offices were approved as accepted. The INPS state officers for 2009 are: President Janet Benoit, Vice President Janet Bala, Secretary Lois Rohay, and Treasurer Jody Hull.

New Field Guide for Sedges Hits the Press

The Carex Working Group is pleased to announce the publication of the "Field Guide to the Sedges of the Pacific Northwest." The book is an illustrated guide to all 164 species, subspecies, and varieties of *Carex* that occur in Washington and Oregon. Botanists will find it useful throughout much of Idaho particularly in western Idaho and in the mountains throughout the state. It contains identification keys, descriptions, color photographs, and distribution maps for each species, along with information about sedge ecology, habitat, and management.

The field guide can be ordered by going to <http://oregonstate.edu/dept/press/e-f/FieldGuideSedges.html> and then clicking on "Secure online ordering form."

CHAPTER NEWS

Calypso Chapter

PREVIOUS EVENTS

The Calypso Chapter continues to help the Friends of Rathdrum Mountain (FRM) develop a plant list. The list contains almost 120 plants found on the mountain. Bob Wilson and Bob Lee went with a FRM member to the mountain on May 17 to update the list. The FRM have been holding fund raisers and membership drives in order to keep 500+ acres of city owned property as forest land.

PROGRAM SCHEDULE

October 1: Gloria Wurm will give a program on the Official Provincial Wildflowers of Canada.

Kinnikinnick Chapter

PREVIOUS EVENTS

Kinnikinnick Chapter Receives Grant - For the second year the Idaho Community Foundation has awarded the North Idaho Native Plant Arboretum funding for educational signage. This will complete an ambitious two year project to label plants and habitat areas at the arboretum as well as places landscaped by our chapter throughout the county. Volunteer labor, donated materials, chapter fundraising, and the two grants from ICF have made this possible.

Our chapter has been actively advocating for landscaping with native plants. We compiled a list of native plants recommended for landscaping in Bonner County for inclusion in the county land use rules and regulations (see our website, www.nativeplantsociety.org for this list). We have put in place a program with Panhandle Special Needs to grow plants from this list and sell them in spring, 2009. Our landscape committee has been hard at work landscaping public areas with native plants, and maintaining these areas to show the beauty and versatility of using these plants in landscaping. In March, Pat Munts, WSU Spokane County Extension Coordinator, presented on landscaping with native plants, attended by 85 people. In April, KC member Don Childress presented a PowerPoint program on his landscaping projects using native plants to an enthusiastic audience at Sandpoint's Earth Day

Celebration. Our North Idaho Native Plant Arboretum hosted the annual Arbor Day Celebration for our county, giving out native plants to the community.

Mycologist Tim Gerlitz presented on spring fungi in North Idaho in April. This was well attended and brought in folks new to our program. We are still talking about the May program on potential effects of global warming on native plants in our region presented by retired USFS Jerry Rehfeldt. In June, our chapter honored our founder, mentor, inspiration and native plant champion, Lois Wythe. Folks from all over the county turned out to highlight her many accomplishments over the years.

Kinnikinnick Chapter Earth Day - Our chapter participated in the first annual Earth Day Celebration at Sandpoint Community Hall sponsored by Idaho Conservation League. The all-day event was enthusiastically received by the community. In fact, it was delightfully crowded! Our chapter had a table to share our mission, activities, and native plant list and gave a presentation on using native plants in landscaping. This program was put together and presented by Don Childress, highlighting the landscaping of his property. Don is a Master Gardener and active member of our Landscape Committee, and his knowledge and experience made for an educational and memorable presentation.

Annual Meeting - The Kinnikinnick Chapter extends appreciation to all who attended the Annual Meeting. It was wonderful to catch up with folks and to make new friends. We were pleased to offer a variety of field trips and speakers, and received much interest in the focus on aquatic species and threats.

PROGRAM SCHEDULE

Saturday, September . 27, at 9:45 AM. Chris Schnepf, Kootenai County Extension Educator, will speak on Forests.

Saturday, Oct. 25, at 9:45 AM. Larry Evans will present the fall Fungi of Scotchmans Peak Wilderness area, followed by a field trip to the Scotchmans Peak Wilderness area.

Loasa Chapter

All INPS members and the public are welcome to attend Loasa's events. If interested or for further details contact Kelvin Jones at (208) 886-7051.

Pahove Chapter

PREVIOUS EVENTS

The Pahove Chapter had an exciting spring and we couldn't have done it without all of the amazing volunteers who helped with our many events!

We would like to send out a special thanks to all of these volunteers, as well as everyone who participated- it is because of you that these events are such a success!

Here are some highlights from these events and others to look forward to:

Pahove Chapter's 15th Annual Earth Day Native Plant Sale - Bright and early on the brisk morning of April 19th, about 30 Pahove Chapter volunteers gathered at the IDFG MK Nature Center to haul plants and set up the annual Earth Day Native Plant Sale. Though cold, windy conditions prevailed throughout the day, we had many eager shoppers and managed to sell most of the 3,000 plants on hand. Of particular note are the three ladies (pictured below) who drove all the way from Council to be first in line. **And**, they arrived nearly two hours early! Kudos to them and many thanks to all who came out to volunteer or purchase plants. And many thanks to the great folks at the Nature Center who so generously allow us to use their site and donate a tremendous amount of effort to this event. We were pleased again this year to donate a share of our profit to them.



A recipe for smiles: pick up some native plants for your home landscape or garden. Want to make your friends smile – get them one too!

National Celebrating Wildflowers Month - The annual spring wildflower walks which are held as part of National Celebrating Wildflowers month were also popular as always, with people of all ages venturing out for an evening in the Boise foothills to see and learn about the beautiful spring wildflowers that were in bloom. This event, which is a collaborative effort between the Idaho Native Plant Society, the Forest Service, the Bureau of Land Management and others, was made possible by the volunteer efforts of many local botanists and enthusiasts.

Boise Flower and Garden Show and Idaho Green Expo - This was our second year hosting a booth at the Boise Flower and Garden Show. We also hosted a booth at the first annual Idaho Green Expo. It was great to see so many people interested in native plants and native plant gardening.

Plant Identification Night - Jim Smith, of Boise State University, hosted a fun and informative plant identification night for our chapter at the BSU Herbarium. We learned all about the mustard family (*Brassicaceae*) and received hands on experience keying out specimens from this tricky family.

Juncus Identification Workshop - The Pahove Chapter and the College of Idaho are currently preparing for the *Juncus* workshop that we are hosting on August 14th and 15th. We are extremely fortunate and excited to have Peter Zika, author of *Juncus* for the new Jepson Manual of the California Flora, instructing this class, which will include two fun-filled days of lectures, labs, and field visits to learn about our common and not so common local rush species.

UPCOMING EVENTS

Idaho Rare Plant Conference - The Pahove Chapter will be hosting the Idaho Rare Plant Conference this year in February. This event is organized by volunteers, therefore your support and time is greatly appreciated. Please contact Karen Colson (trilliumkc@msn.com) if you are interested in volunteering to help with this important event.

Annual Presentation Series

We are also gearing up for our fall and winter presentation series. We will hold our season kick-off pizza party again this year in September (Details TBA). The Pahove Chapter hosts monthly presentations from September through April on 3rd Thursdays at the MK Nature Center Auditorium (with few exceptions), 601 South Walnut in Boise.

For more information, please visit the website, <http://www.idahonativeplants.org/>, or contact Karen Colson (trilliumkc@msn.com).

We hope you are having a fantastic summer and we look forward to seeing you in September!

Sah-Wah-Be Chapter

From May through September our chapter hosts at least one Monday evening field trip and one Saturday/weekend field trip a month for our members and the general public.

PREVIOUS EVENTS

May 3 – Kick-off field trip & potluck – Our field trip season began on Cherry Springs trails and up the Kinney Creek drainage, USFS areas south of Pocatello. Plant guide Dr. Karl Holte, ISU Emeritus Professor of Botany, provided a list of 86 area plants. Prominent that day were leafy bluebells, sagebrush buttercup, and much more. Afterwards, most of the 40-plus people in attendance headed to the Holtes' house for a potluck meal and socializing.

May 19 – Field trip – Linda and Wendell Johnson invited all to see the abundant spring native flora that covered the hillsides and meadows of their property, "Hurricane Hill," located high atop a hill southwest of Inkom. An Idaho State Journal reporter who joined us subsequently ran a full-page story about INPS and our chapter, with pictures of flowers and people at this event.

May 31 – Pocatello Greenway – The Edson Fichter portion of the Pocatello Greenway was the site for a native plant walk co-sponsored by our local chapter, the Idaho Museum of Natural History, and the Pocatello Greenway Foundation. Janet Bala, botanist and past president of our chapter, was the plant guide for an enthusiastic group of 38 people.

June 2, July 7, & August 4- USFS trail – A series of three guided plant walks along the West Fork of Mink Creek trail covered a three-month period in order to observe seasonal changes in the flora in one area. A huge abundance of flowering serviceberry and Oregon-grape dominated the June trip. The July trip presented masses of flowering choke cherry and arrowleaf balsamroot. On the August walk we saw blooming and fruiting elderberry, much purple fireweed, and tasted delicious serviceberries and golden currants. The groups were guided by the expertise of Kristin Fletcher, Ruth Moorhead, Mel

Nicholls, and Karl Holte, plus a list of almost 150 species.

June 7 - Hell's Half Acre – Our planned trip to the top of Big Southern Butte had to be canceled due to bad road conditions. Trip leader Wendy Velman, a BLM botanist, opted instead to lead a walk along Hell's Half Acre by I-15 between Blackfoot and Idaho Falls. Wendy had group members smell and compare all parts of a wild onion and foothills death camas. Although the death camas looks similar to the wild onion, Wendy emphasized that no part of the death camas smells like an onion. Definitely an eat-me-not! Wendy shared her vast knowledge of the area flora, pollinators, and symbiotic relationships.

June 9 – Pebble Creek Ski Area – The Boundary Trail in the Pebble Creek ski resort area south of Inkom always is a floral treat. Over 44 flowering plants and shrubs were observed and noted by trip leader Janet Bala. Arrowleaf balsamroot and mule's ears created a blanket of yellow with spots of other colors in between from scarlet gilia, sticky purple geraniums, many gorgeous tall chocolate lilies, and more. One sorrel, unidentified that evening, was later keyed out in the ISU Herbarium as Mountain Sorrel, *Rumex paucifolius*.

INPS Annual Meeting - Our local chapter was represented by Barbara Nicholls (Sah-Wah-Be president), Mel Nicholls, Catalina Steckbauer (chapter treasurer) and Bill Steckbauer, all of whom enjoyed this lovely area.

June 23 - Aberdeen Plant Materials Center - What a delight to the senses! Researcher Steve Love showed the group many varieties of native plants such as blooming columbines, test trials of yellow poppies, and 70 – 80 species of penstemons of every color and hue, including hot rock, Palmer's, sulphur, and prairie. A bonus was a walk through the Aberdeen Rotary Park Hardy Rose Garden.

Weekend of June 27 - Palisades Reservoir area – A wonderful weekend was spent exploring the shaded nature trails at Big Elk Campground in the Palisades Reservoir area. Leader Ruth Moorhead not only identified many of the 200 species noted in the handout for this area but also pointed out the characteristics that place them in one botanical family or another. Due to the wet spring, the hills were carpeted with flowers and along the trail were many snowberry and thimbleberry bushes, budding sego lilies, and more. Many camped the entire weekend and enjoyed Dutch oven potluck, a birthday, and socializing and singing around the campfire.

July 12 – Big Springs nature trail– Dr. Karl Holte led a fun trip in Big Springs Campground and shady nature trail southeast of Lava Hot Springs. With the aid of a walkie-talkie in each car caravanning to the site, Karl pointed out the various plants, shrubs, and trees along the roads to our destination. A total of 72 species were noted along the trail route. Special finds were four species of orchid: rein, bog, and spotted and striped coralroots. The blue-leaf strawberries were small but ripe and tasty, fragrant Jacob's ladder pleased our noses, and the fringed Grass-of-Parnassus was an amazing sight through our hand lenses. The trip was topped off with a culinary treat: lunch at Lava's famed Thai restaurant.

July 21 – Inman Canyon – Plant guide Ruth Moorhead lead our group along a shaded trail above Inman Creek. Seen were the abundant white blooms of Richardson's geranium, the poisonous bright red berries of the baneberry, and much more.

UPCOMING EVENTS

Monday Evening, September 8 - USFS trail - This will be a guided plant walk along Gibson Jack Trail bordering Pocatello's south city limits. Phone 208-233-0714 for details.

Saturday, September 13 - Goodenough Canyon near McCammon- The final field trip of the season will again be enjoyed in this beautiful canyon with a flowing stream and many deciduous trees showing great fall colors. A potluck chili feed will follow the guided plant walk. Phone 208-233-0714.

PROGRAM SCHEDULE

The first Monday of each month, October through March, our chapter will present a speaker or interactive event at 7:00 pm in the Lecture Room of the Idaho Museum of Natural History on Idaho State University Campus for members and the general public. Phone 208-233-0714.

2009 STATE MEETING, JUNE 26-27

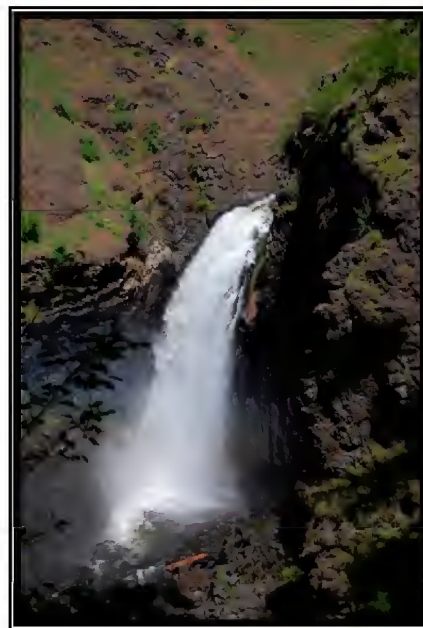
We encourage you to mark your calendar and plan to attend the June 2009 INPS Annual State Meeting in the Island Park Area, 30 miles south of West Yellowstone and the west entrance to Yellowstone National Park. Sah-Wah-Be Chapter has reserved all of a group site in Loop E in the Buffalo Campground (5 minutes from Pond's Lodge in Island Park), for Friday and Saturday, June 26 and 27. Reservations can also be made there individually by anyone who wants to stay longer before and/or after as well. Some of the field trip locations we are considering for this

state meeting are Harriman State Park; Upper/Lower Mesa Falls; the Nature Conservancy's Flat Ranch; Sawtell Peak; and Big Springs river float to Mack's Inn. Why not make this into a longer trip to enjoy the area? A visit to Yellowstone Park is always awesome. Float a river, fish in the famous Henry's Fork, or visit the town of West Yellowstone. All locations mentioned are very close to our campground site, about a 30-minute drive or less.

White Pine Chapter

PREVIOUS EVENTS

A late June hike into the Elk Creek Falls Recreation Area was led by Pam Brunsfeld, manager of the University of Idaho Stillinger Herbarium. This lovely forested area, located on the edge of the rolling hills of the Palouse prairie and about three miles south of the small town of Elk



River, is a favorite destination for local hikers. A three-mile trail network leads hikers to overlooks for viewing a series of three separate falls, which drop a total of 300 feet into a deeply dissected basalt gorge, creating the highest falls in northern Idaho. The basalt columns that edge the spectacular lower falls are especially impressive and were flanked by *Clarkia pulchella*. This past winter's heavy snowpack was evident by the deep pools beneath the cascades.

A primary focus of this trip was to locate several species of achlorophyllous orchids; there is an abundance of mycorrhizal fungi in this coniferous forest, supporting such orchid growth. Three members of the genus *Corallorhiza* grow here: (*C. maculata*, "spotted coral root"; *C. mertensiana*, "Merten's coral root"; and *C. trifida*, "early coral root"). The "roots" of these plants are actually hard

masses of rhizomes associated with a fungus that assists in absorbing nutrients from the humus-rich soil; technically, such a relationship can be termed parasitic rather than saprophytic. Stems of *C. maculata* tend to grow in masses of colonies, a striking sight under the shade of Douglas fir (*Pseudotsuga menziesii*). While the individual purplish flowers are rather inconspicuous at less than $\frac{3}{4}$ of an inch, the loose racemes cast a pink glow in such a setting.

An exciting find was the phantom orchid, *Cephalanthera austinae* (formerly *Eburophyton austinae*), which was breath-taking in the white simplicity of its stems and racemes although it was not fully opened yet.



A host of other flowering plants were also blooming at this time, and Pam shared her extensive knowledge with a most appreciative group.

It must also be noted that a trip to Elk Creek Falls would not be complete without a stop in the town of Elk River to cool off with a treat of huckleberry ice cream or a shake at the local general store.

On April 24, we assisted in sponsoring the Rare Plant Symposium, a joint program with the University of Idaho Department of Rangeland Ecology and the Stillinger Herbarium, at the UI. Several speakers representing various agencies from around the Northwest, including U.S. Fish and Wildlife, addressed issues including livestock management, conservation strategies and monitoring approaches and data analysis for rare plants, with a particular emphasis to *Silene spaldingii*.

On April 26, we had a very successful chapter field trip to the Grande Ronde River, led by Nancy Miller and Dr. Bill Rember, for a day discovering the wildflowers and geology of the Grande Ronde. We stopped briefly at Field Springs State Park where there was still considerable snow (and no flowers) and at one of the pull-offs along Rattlesnake Grade to see the profusion of early spring flowers. We were especially glad to have Pam Brunsfeld along to help

with plant identification. At the bottom of the grade we checked out the riparian vegetation along the stream as well as the geologic features of the canyon. We then proceeded towards Troy, OR along the Grande Ronde River. Because of the lower elevation,



a different selection of flowers was blooming. We then traveled from Troy to Flora, Oregon where again there was too much snow still for viewing flowers; then we proceeded to the Mima Mounds located on the road to Enterprise (Hwy 3) where Bill explained the theories relating to the formation of the Mima Mounds and where we saw some emerging Brown's Peonies (*Paeonia brownii*).

On June 24, a grass identification workshop was led by Peggy Chevalier.

UPCOMING EVENTS

Saturday, September 20, noon: Annual Potluck at Great White Pine Campground (about 45 min. from Moscow; drive north from Moscow on HW 95; turn right onto HW 6 at the Potlatch junction; continue east past Potlatch, Harvard, and Princeton, past Laird Park and on to the White Pine Campground parking lot on the right). **Meet at Rosauer's for carpooling at 11 a.m. Bring:** A dish to share, your own place setting and beverage. There will be a brief chapter meeting, followed by an opportunity to hike the trails.

Questions regarding White Pine happenings can be directed to Janet Campbell, [jnacampbell at roadrunner dot com](mailto:jnacampbell@roadrunner.com), (208) 882-6409.

Wood River Chapter

Future Activities TBD: Contact chapter president Tess O'Sullivan for updates



Idaho Native Plant Society
P.O. Box 9451
Boise, ID 83707

Non Profit
Organization
U.S. Postage Paid
Boise, ID
Permit No. 688

ADDRESS SERVICE REQUESTED

Sage Notes is published four times a year in February, May, September, and December by the Idaho Native Plant Society, incorporated since 1977, under the laws of the State of Idaho. Editor, Dylan Levy-Boyd. **Newsletter ads:** personal ads \$2; commercial ads \$5 for 1/8 page, \$8 for 1/4 page, \$15 for 1/2 page, and \$25 for full page. Ads should be sent with payment. **Submissions:** members and others are invited to submit material for publication. Articles in any form, even hand-written, are welcome, as is art work. Please provide a phone number in case there are questions. Material will not be returned. Send submissions directly to the editor, Dylan Levy-Boyd, 506 Center St. West, Kimberly, ID 83341, or <dylan at csr-inc dot com>. Submission deadlines are January 8, April 1, August 1, and November 1.

Officers: President, Janet Benoit; Vice President, Janet Bala; Secretary, Lois Rohay; Treasurer, Jody Hull. **Calypso Chapter**, P.O. Box 331, Careywood, ID 83809. President, Bob Lee; Vice President, Roland Craft; Secretary, VACANT; Treasurer, Janet Benoit; Newsletter, Phil Hruskocy. **Kinnikinnick Chapter**, 206 N. 4th Ave., PMB 162, Sandpoint, ID 83864. President, Carol Jenkins; Vice President, Jim Stern; Secretary, Konrad Dahlstrom; Treasurer, Ken Haag; Conservation, Carol Jenkins; Programs, Don Childress; Newsletter, Adrienne Lilly; Field Trips, Molly O' Reilly; Education, Nancy Fontaine. **Loasa Chapter**, 340 E 520 N, Shoshone, ID 83352. President, Kelvin Jones; Vice President, LaMar Orton; Secretary, Lois Rohay; Treasurer, Steve Paulsen. **Pahove Chapter**, PO Box 9451, Boise, ID 83707. President, Karen Colson; Vice President, Linda Mazzu; Secretary, VACANT; Treasurer, Jody Hull; Conservation, Chris Colson; Member-at-large, Susan Ziebarth. **Sah-Wah-Be Chapter**, 146 South 17th Avenue, Pocatello, ID 83201. President, Barbara Nicholls; Vice Presidents, Penny Fazio and Pauline Havens; Secretary, Shirley Rodgers; Treasurer, Catalina Steckbauer; News, Linda Johnson and Ardys Holte; Members-at-Large, Mel Nicholls, Karl Holte, Dick Anderson; Past-President, Janet Bala. **White Pine Chapter**, PO Box 8481, Moscow, ID 83843. President, Janet Campbell & Nancy Miller; Vice President, David Pierce; Secretary, OPEN; Treasurer, Nancy Sprague; Conservation, Juanita Lichthardt. **Wood River Chapter**, PO Box 3093, Hailey, ID 83333. President, Tess O'Sullivan; Vice President, Carol Blackburn; Secretary, VACANT; Treasurer, VACANT.

The Idaho Native Plant Society (INPS) is dedicated to promoting interest in native plants and plant communities and to collecting and sharing information on all phases of the botany of native plants in Idaho, including educating the public to the values of the native flora and its habitats. In keeping with our mission, it is the intent of the INPS to educate its membership and the public about current conservation issues that affect Idaho's native flora and habitats. **Membership** is open to anyone interested in our native flora. Send dues to Jody Hull, INPS Treasurer, Box 9451, Boise, ID 83707. Website address: IdahoNativePlants.org.

Category 2008 Annual Dues

<input type="checkbox"/> Patron	\$35
<input type="checkbox"/> Individual	\$15
<input type="checkbox"/> Household *	\$20
<input type="checkbox"/> Student	\$8
<input type="checkbox"/> Senior Citizen	\$8

Name _____
Address _____
City/State _____
Zip _____ Telephone _____
E mail _____

Chapter affiliation? (check one)

☐ Calypso (Coeur d'Alene; please include \$6 newsletter dues)
☐ Kinnikinnick (Sandpoint; please include \$10 for Kinnikinnick Journal)
☐ Pahove (Boise) ☐ Sah-Wah-Be (SE Idaho)
☐ White Pine (Moscow) ☐ Loasa (Twin Falls)
☐ Wood River (Ketchum-Sun Valley)
☐ None. Those who do not live near a chapter are encouraged to join. We can put you in touch with other members in your area, and can coordinate with you on any state level activities you may wish to be involved in.

* Household memberships are allocated two votes